

WHAT IS CLAIMED IS:

1. A light detection device comprising:
a light-receiving element including
a semiconductor layer for detecting light and
a first electrode which is electrically connected with the semiconductor layer;
an insulative substrate for supporting the light-receiving element; and
a second electrode which is provided so as to be exposed at a first face and a second face of
the insulative substrate,
wherein the light-receiving element is disposed on the first face of the insulative substrate,
and
the first electrode is electrically connected with the second electrode that is exposed at the
first face of the insulative substrate.
2. The light detection device of claim 1, wherein the first electrode is constituted by at
least two electrodes, and the second electrode is constituted by at least two electrodes.
3. The light detection device of claim 1, wherein the second electrode comprises a metal
electrode.
4. The light detection device of claim 1, wherein the insulative substrate absorbs visible
light.
5. The light detection device of claim 1, wherein the light-receiving element includes a
transparent substrate on which the semiconductor layer and the first electrode are disposed.

6. The light detection device of claim 1, wherein the light-receiving element comprises a transparent substrate,

the first electrode comprises a first layer and a second layer, and the first layer, the semiconductor layer and the second layer are laminated on the transparent substrate in this order, and

the first layer of the first electrode is transparent.

7. The light detection device of claim 1, wherein the first electrode is connected with the second electrode that is exposed at the first face of the insulative substrate via a conductive member.

8. The light detection device of claim 7, wherein, excluding a portion that is connected by the conductive member, at least a portion of a face of the light-receiving element which face opposes the insulative substrate is fixed to the insulative substrate with an adhesive layer therebetween.

9. The light detection device of claim 1, wherein a recess portion is formed in the insulative substrate, and the light-receiving element is embedded in the recess portion.

10. The light detection device of claim 1, wherein the semiconductor layer of the light-receiving element comprises a nitride including nitrogen and at least one element selected from the group consisting of Al, Ga and In.

11. The light detection device of claim 10, wherein the nitride comprises hydrogen, with

a hydrogen density of at least approximately 0.5 at% and at most approximately 50 at%.

12. The light detection device of claim 1, wherein the semiconductor layer comprises an oxide semiconductor.

13. The light detection device of claim 1, wherein the second electrode is provided so as to be exposed at a front face and a rear face of the insulative substrate, the light-receiving element is disposed on the front face of the insulative substrate, and the first electrode is electrically connected with the second electrode that is exposed at the front face of the insulative substrate.

14. The light detection device of claim 1, wherein a plurality of the light-receiving elements are provided on the insulative substrate.

15. A light detection device mounting method, comprising:
preparing a light-receiving element which includes a semiconductor layer for detecting light and a first electrode which is electrically connected with the semiconductor layer;
providing a second electrode so as to be exposed at a first face and a second face of an insulative substrate;

preparing the light detection device by disposing the light-receiving element on the first face of the insulative substrate such that the first electrode is electrically connected with the second electrode that is exposed at the first face of the insulative substrate; and

surface-mounting the light detection device on a circuit board such that the second electrode that is exposed at the second face of the insulative substrate is connected with an external terminal of the circuit board.

16. The light detection device mounting method of claim 15, wherein the first electrode is constituted by at least two electrodes, and the second electrode is constituted by at least two electrodes.

17. The light detection device mounting method of claim 15, wherein the second electrode comprises a metal electrode.

18. The light detection device mounting method of claim 15, wherein the insulative substrate absorbs visible light.

19. The light detection device mounting method of claim 15, wherein the light-receiving element includes a transparent substrate on which the semiconductor layer and the first electrode are disposed.

20. The light detection device mounting method of claim 15, wherein the semiconductor layer of the light-receiving element comprises a nitride including nitrogen and at least one element selected from the group consisting of Al, Ga and In.

21. The light detection device mounting method of claim 15, wherein the second electrode is provided so as to be exposed at a front face and a rear face of the insulative substrate, the light-receiving element is disposed on the front face of the insulative substrate, and the first electrode is electrically connected with the second electrode that is exposed at the front face of the insulative substrate.